

There is disclosed a packet processing apparatus in which connection-oriented and connectionless data transfer systems are combined for use, and definite data transmission is secured even when a traffic load of a data transmission bus is large. An IP packet communication apparatus for using asynchronous and isochronous communication channels to perform a processing of an IP packet includes an address table for storing attribute information of the IP packet to be transmitted, each IP packet including information indicative of presence/absence of transmission in a fixed interval, a transmission monitor for periodically monitoring the information of the address table, and a CMP processor for receiving judgment information obtained by judging continuity of a traffic by the transmission monitor, and establishing the communication channel for asynchronous transmission.